



DM (Env & PC) *M. Saha.*  
08/04/22

**PUNJAB POLLUTION CONTROL BOARD**  
Zonal Office-1, Vatavaran Bhawan, Nabha Road, Patiala - 147001  
Website:- www.ppcb.gov.in

Office Dispatch No : 2241

Registered/Speed Post

Date: 7.4.22

Industry Registration ID: R14RPN1803536

Application No : 17789314

To,

M P S Walia  
PacI Nangal Una Road Naya Nangal  
Nangal,Rupnagar-140126

Subject: Grant Varied 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act, 1981 for discharge of emissions arising out of premises.

With reference to your application for obtaining Varied 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act, 1981, you are hereby, authorized to operate an industrial unit for discharge of the emission(s) arising out of your premises subject to the Terms and Conditions as mentioned in this Certificate.

**1. Particulars of Consent to Operate under Air Act, 1981 granted to the industry**

Consent to Operate Certificate No.	CTOA/Varied/RPN/2022/17789314
Date of issue :	07/04/2022
Date of expiry :	31/03/2023
Certificate Type :	Varied
Previous CTO No. & Validity :	CTE/Exp/RPN/2021/16314815 From:25/07/2021 To:12/07/2022

**2. Particulars of the Industry**

Name & Designation of the Applicant	M P S Walia , (Gm Works)
Address of Industrial premises	Punjab Alkalies And Chemicals Limited, Naya Nangal , Anandpur Sahib,Rupnagar-140126
Capital Investment of the Industry	35611.66 lakhs
Category of Industry	Red
Type of Industry	1041-Chlor Alkali
Scale of the Industry	Small
Office District	Rupnagar
Consent Fee Details	Rs. 1,44,000/- vide NEFT/ UTR No. SBIN222017133068 dated 17/1/2022 and Rs. 1,44,000/- vide NEFT/ UTR No. SBIN222017071782 dated 17/1/2022

"This is computer generated document from OCMMS by PPCB"

Punjab Alkalies And Chemicals Limited,Naya Nangal ,Anandpur Sahib,Rupnagar,140126

Page1

<b>Raw Materials (Name with Quantity per day)</b>	<p>INDUSTRIAL SALT @ 262350.00 MT/Year  SODA ASH @ 660 MT/Year  BARIUM CARBONATE @ 1320.00 MT/Year  SODIUM BISULPHITE @ 247.00 MT/Year  FLOCAL @ 2.500 MT/Year  ALPHA CELLULOSE @ 7.80 MT/Year  SULPHURIC ACID @ 3268.00 MT/Year  RICE HUSK @ 19800.00 MT/Year</p>
<b>Products (Name with Quantity per day)</b>	<p>CAUSTIC SODA @ 165000 MT/Year  CHLORINE GAS @ 146190 MT/Year  HYDROGEN GAS @ 4125 MT/Year</p>
<b>By-products, if any, (Name with Quantity per day)</b>	<p>LIQUID CHLORINE @ 146190 MT/Year  HYDROCHLORIC ACID @ 66000 MT/Year  SODIUM HYPOCHLORITE @ 3333 MT/Year</p>
<b>Details of the machinery and process</b>	<p>As per details mentioned in the Application ID no.17789314</p> <p>Raw material-&gt; Manufacturing of Brine Solution-&gt; Removing of Impurities-&gt; Brine Filtration-&gt; Electrolysis-&gt; Hydrogen Separation-&gt; HCL Production-&gt; Sodium Hypochlorite production by scrubbing of chlorine with caustic soda.</p>
<b>Quantity of fuel required (in TPH) and capacity of boilers/ Furnace/Thermo heater etc.</b>	<ol style="list-style-type: none"> <li>1. Boiler of 10 TPH capacity - Fuel Hydrogen Gas @ 3.182 TPH</li> <li>2. Boiler of 10 TPH capacity - Fuel Furnace Oil @ 0.664 TPH</li> <li>3. Boiler of 8 TPD capacity - Fuel Rice Husk @ 27 TPD</li> <li>4. Boiler of 5 TPH capacity - Fuel Furnace Oil @ 0.332 MT/day</li> <li>5. Boiler of 5 TPH capacity - Fuel Hydrogen Gas @ 1.591 TPH</li> <li>6. Two no. Furnaces @ 120 TPH capacity each - Fuel Hydrogen @ 1.356 MT/day each</li> <li>7. Two No. Furnaces @ 120 TPH capacity each - Fuel Chlorine @ 36.185 MT/day each</li> <li>8. Three no. DG Sets of 500 KVA each - Fuel HSD @ 6 Lit/day each</li> <li>9. One DG Set of capacity 515 KVA - Fuel HSD @ 6 Lit/day</li> </ol>
<b>Type of Air Pollution Control Devices to be installed</b>	<ol style="list-style-type: none"> <li>1. Boiler of 8 TPH capacity - Stack of 25 mtr above roof level and Bag Filter House provided as APCD</li> <li>2. Two no. Furnaces @ 120 TPD capacity each - Stack of 4 mtr height above roof level and Water Sprinkling system provided as APCD each</li> <li>3. Two No. Furnaces @ 120 TPD capacity each - Stack of 4 mtr height above roof level and Water Sprinkling system provided as APCD each.</li> <li>4. Boiler of 8 TPH capacity - Stack of 25 mtr above roof level - Bag filter house provided as APCD</li> <li>5. Hypo Plant-1 - Stack of 3 mt. above roof level - Alkali Scrubber provided as APCD</li> <li>6. Hypo Plant-2 - Stack of 3 mt. above roof level - Alkali Scrubber provided as APCD</li> <li>7. Three no. DG Sets of 500 KVA each - Canopy and adequate stack of 12 mtr above roof each.</li> <li>8. One DG Set of capacity 515 KVA - Canopy and stack of 12 mtr above roof provided.</li> </ol>

<p><b>Stack height provided with each boiler/thermo heater/Furnace etc.</b></p>	<ol style="list-style-type: none"> <li>1. Boiler of 10 TPH capacity - Stack of 30 mtr above roof level</li> <li>2. Boiler of 10 TPH capacity - Stack of 30 mtr above roof level</li> <li>3. Boiler of 8 TPH capacity - Stack of 25 mtr above roof level and Bag Filter House provided as APCD</li> <li>4. Boiler of 5 TPH capacity - Stack of 30 mtr above roof level</li> <li>5. Boiler of 5 TPH capacity - Stack of 30 mtr above roof level</li> <li>6. Two no. Furnaces @ 120 TPD capacity each – Stack of 4 mtr height above roof level and Water Sprinkling system provided as APCD each</li> <li>7. Two No. Furnaces @ 120 TPD capacity each – Stack of 4 mtr height above roof level and Water Sprinkling system provided as APCD each</li> <li>8. Boiler of 10 TPH capacity - Stack of 10 mtr above roof level</li> <li>9. Boiler of 5 TPH capacity - Stack of 10 mtr above roof level</li> <li>10. Boiler of 8 TPH capacity - Stack of 10 mtr above roof level - Bag filter house provided as APCD</li> <li>11. Hypo Plant-1 - Stack of 3 mtr above roof level – Alkali Scrubber provided as APCD</li> <li>12. Hypo Plant-2 - Stack of 3 mtr above roof level – Alkali Scrubber provided as APCD</li> <li>13. Three no. DG Sets of 500 KVA each - Canopy and adequate stack of 12 mtr above roof each</li> <li>14. One DG Set of capacity 515 KVA - Canopy and stack of 12 mtr above roof provided</li> </ol>
<p><b>Sources of emissions and type of pollutants</b></p>	<p>SODIUM HYPO PLANT UNIT 1 - CHLORINE GAS  SODIUM HYPO PLANT UNIT 2 - CHLORINE GAS  HCL FURNACE UNIT 1 - ACID MIST  HCL FURNACE UNIT 2 - ACID MIST  THERMAX BOILER UNIT 1 - SO<sub>x</sub> &amp; NO<sub>x</sub>  STERLING BOILER UNIT 2 - SO<sub>x</sub> &amp; NO<sub>x</sub>  HUSK BOILER UNIT 2 - SO<sub>x</sub> &amp; NO<sub>x</sub> &amp; SPM  DG Sets - SO<sub>x</sub>, NO<sub>x</sub> &amp; SPM</p>
<p><b>Standards to be achieved under Air(Prevention &amp; Control of Pollution) Act, 1981</b></p>	<p>As per emission standards as prescribed by the PPCB/ CPCB/ MoEF&amp;CC from time to time.</p>



07/04/2022

**( Kuldeep Singh )  
Environmental Engineer**

For & on behalf

of

**(Punjab Pollution Control Board)**

**Endst. No.:**

**Dated:**

A copy of the above is forwarded to the following for information and necessary action please:

"This is computer generated document from OCMMS by PPCB"

Punjab Alkalies And Chemicals Limited, Naya Nangal, Anandpur Sahib, Rupnagar, 140126

Page 3

1) The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Roopnagar



07/04/2022

**( Kuldeep Singh )  
Environmental Engineer**

*For & on behalf*

*of*

**(Punjab Pollution Control Board)**

*"This is computer generated document from OCMMS by PPCB"*

*Punjab Alkalies And Chemicals Limited, Naya Nangal, Anandpur Sahib, Rupnagar, 140126*

*Page 4*

## TERMS AND CONDITIONS

### A. GENERAL CONDITIONS

1. This consent is not valid for getting power load from the Punjab State Power Corporation Ltd. or for getting loan from the financial institutions.
2. The industry shall apply for renewal /extension of consent at least two months before expiry of the consent.
3. The industry shall not violate any of the norms prescribed under the Air (Prevention & Control of Pollution) Act, 1981, failing which, the consent shall be cancelled / revoked.
4. The achievement of adequacy and efficiency of the air pollution control devices installed shall be the entire responsibility of the industry
5. The authorized fuel being used shall not be changed without the prior written permission of the Board.
6. The industry shall not discharge any fugitive emissions. All gases shall be emitted through a stack of suitable height, as per the norms fixed by the Board from time to time.
7. The industry shall provide port-holes, platforms and/or other necessary facilities as may be required for collecting samples of emissions from any chimney, flue or duct or any other outlets.

#### Specifications of the port-holes shall be as under:-

- i) The sampling ports shall be provided atleast 8 times chimney diameter downstream and 2 times upstream from the flow disturbance. For a rectangular cross section the equivalent diameter (De) shall be calculated from the following equation to determine upstream, downstream distance:-  

$$De = 2 LW / (L+W)$$

Where L= length in mts. W= Width in mts.
  - ii) The sampling port shall be 7 to 10 cm in diameter
8. The industry shall put display Board indicating environmental data in the prescribed format at the main entrance gate.
  9. The industry shall discharge all gases through a stack of minimum height as specified in the following standards laid down by the Board.

#### (i) Stack height for boiler plants

S.NO.	Boiler with Steam Generating Capacity	Stack heights
1.	Less than 2 ton/hr.	9 meters or 2.5 times the height of neighboring building whichever is more
2.	More than 2 ton/hr. to 5 ton/hr.	12 meters
3.	More than 5 ton/hr. to 10 ton/hr	15 meters
4.	More than 10 ton/hr. to 15 ton/hr	18 meters
5.	More than 15 ton/hr. to 20 ton/hr	21 meters
6.	More than 20 ton/hr. to 25 ton/hr.	24 meters
7.	More than 25 ton/hr. to 30 ton/hr.	27 meters
8.	More than 30 ton/hr.	30 meters or using the formula $H = 14 Qg^{0.3}$ or $H = 74 (Qp)^{0.24}$ Where Qg = Quantity of SO <sub>2</sub> in Kg/hr. Qp = Quantity of particulate matter in Ton/day.

**Note :** Minimum Stack height in all cases shall be 9.0 mtr. or as calculated from relevant formula whichever is more.

(ii) For industrial furnaces and kilns, the criteria for selection of stack height would be based on fuel used for the corresponding steam generation.

(iii) Stack height for diesel generating sets:

Capacity of diesel generating set	Height of the Stack	
0-50 KVA	Height of the building	+ 1.5 mt
50-100 KVA	-do-	+ 2.0 mt.
100-150 KVA	-do-	+ 2.5 mt.
150-200 KVA	-do-	+ 3.0 mt.
200-250 KVA	-do-	+ 3.5 mt.
250-300 KVA	-do-	+ 3.5 mt.

**For higher KVA rating stack height H (in meter) shall be worked out according to the formula:**

$$H = h + 0.2 (KVA) 0.5$$

where h = height of the building in meters where the generator set is installed.

10. The pollution control devices shall be interlocked with the manufacturing process of the industry to ensure its regular operation.
11. The existing pollution control equipment shall be altered or replaced in accordance with the directions of the Board, and no pollution control equipment or chimney shall be altered or as the case may be erected or re-erected except with the prior approval of the Board.
12. The industry will provide canopy and adequate stack with the D.G sets so as to comply with the provision of notification No GSR-371 E dated 17-5-2002(amended from time to time) issued by MOEF under Environment (Protection) Act, 1986.
13. The Govt. of Punjab, Department of Science, Technology & Environment vide its notification no.4/46/92-3ST/2839 dt. 29/12/1993 has put prohibition on the use of rice husk as fuel after 1.4.1995 except the following:-  
**½In the form of briquettes and use of rice husk in fluidized bed combustion. So the industry shall make the necessary arrangement to comply with the above notification.½**
14. The industry shall submit balance sheet of every financial year to the concerned Regional Office by 30th June of every year
15. That the industry shall submit a yearly certificate to the effect that no addition / up-gradation/ modification/ modernization has been carried out during the previous year otherwise the industry shall apply for the varied consent.
16.
  - a) The industry shall ensure that at any time the emission do not exceed the prescribed emissions standards laid down by the Board from time to time for such type of industry /emissions.
  - b) The industry shall ensure that the emissions from each stack shall conform to the following emission standards laid down by the Board in respect of the Industrial Boilers.

Steam Generating capacity A.	Required particulate matter B.	
<i>Area upto 5 Km from Other than 'A' class Other than the periphery of I and Class-II town</i>		
Less than 2 ton/hr.	800 mg/NM3	1200 mg/NM3
2 ton to 10 ton/hr.	500 mg/NM3	1000 mg/NM3
Above 10 ton to 15 ton/hr	350 mg/NM3	500 mg/NM3
Above 15 ton/hr	150 mg/NM3	150 mg/NM3

All emissions normalized to 12% carbon dioxide.

17. The industry shall ensure that the Hazardous Wastes generated from the premises are handled as per the provisions of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008, without any adverse effect on the environment, in any manner.
18. The air pollution control equipments shall be kept at all time in good running condition and;

- (i) All failures of control equipments.
  - (ii) The emissions of any air pollutant into the atmosphere in excess of the standards lay down by the Board occurring or being apprehended to occur due to accident or other unforeseen act or event. 'Shall be intimated through fax to the concerned Regional Office as well as to the Director of Factories, Punjab, Chandigarh as required under rule 10 of the Punjab State Board for the Prevention and Control of Air Pollution Rules, 1983'.
19. The industry shall plant minimum of three suitable varieties of trees at the density of not less than 1000 trees per hectare all along the boundary of the industrial premises.
  20. The industry shall submit a site emergency plan approved by the Chief Inspector of Factories, Punjab as applicable.
  21. The industry shall comply with the conditions imposed by the SEIAA/MOEF in the Environmental Clearance granted to it as required under EIA notification dated 14/9/06, if applicable.
  22. The industry shall make necessary arrangements for the monitoring of stack emissions and shall get its emissions analyzed from lab approved / authorized by the Board:-
    - (i) Once in Year for Small Scale Industries.
    - (ii) Twice/thrice/four time in a Year for Large/Medium Scale Industries.
  23. The industry shall maintain the following record to the satisfaction of the Board :-
    - (i) Log books for running of air pollution control devices or pumps/motors used for it.
    - (ii) Register showing the result of various tests conducted by the industry for monitoring of stack emissions and ambient air.
    - (iii) Register showing the stock of absorbents and other chemicals to be used for scrubbers.
  24. The industry will install the separate energy meter for running pollution control devices and shall maintain record with respect to operation of air pollution control device so as to satisfy the Board regarding the regular operation of air pollution control device and monthly reading / record may be sent to the Board by the fifth of the following month.
  25. The industry shall provide online monitoring system as applicable, for in stack emission and shall maintain the record of the same for inspection of the Board Officers.
  26. The Board reserves the right to revoke the consent granted to the industry at any time, in case the industry is found violating the provisions of Air (Prevention & Control of Pollution) Act, 1981 as amended from time to time.
  27. The industry shall comply with any other conditions laid down or directions issued in due course by the Board under the provisions of the Air (Prevention & Control of Pollution) Act, 1981.
  28. Nothing in this consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected to under this or any other Act.
  29. Any amendments/revisions made by the Board/CPCB/MOEF in the emission/stack height standards shall be applicable to the industry from the date of such amendments/revisions.
  30. The industry shall dispose off its solid waste generated by the burning of fuel in an Environmentally Sound Manner within the premises/outside as approved by the Board, to avoid public nuisance and air pollution problem in the area.
  31. The industry shall ensure that no air pollution problem or public nuisance is created in the area due to the discharge of emissions from the industry.
  32. The industry shall provide adequate arrangement for fighting the accidental leakage/discharge of any air pollutant/gas/ liquids from the vessels, mechanical equipment's etc, which are likely to cause environmental pollution.
  33. The industry shall not change or alter the manufacturing process(es) and fuel so as to change the quality/quantity of emissions generated without the prior permission of the Board.
  34. The industry shall earmark a land within their premises for disposal of boiler ash in an environmentally sound manner, and / or the industry shall make necessary arrangements for proper disposal of fuel ash in a scientific manner and shall maintain proper record for the same, if applicable.
  35. The industry shall obtain and submit Insurance cover under the Public Liability Insurance Act, 1991.
  36. The industry shall provide proper and adequate air pollution control arrangements for control emission from its fuel handling area, if applicable.

37. The industry shall comply with the code of practice as notified by the Government/Board for the type of industries where the siting guidelines / Code of Practice have been notified.
38. The industry shall not cause any nuisance/traffic hazard in vicinity of the area
39. The industry shall ensure that the noise & air emission from D.G. sets do not exceed the standards prescribed for D.G. sets by the Ministry of Environment & Forests, New Delhi.
40. The industry shall ensure that there will not be significant visible dust emissions beyond the property line
41. The industry shall provide adequate and appropriate air pollution control devices to contain emissions from handling, transportation and processing of raw material & product of the industry.
42. The Industry shall ensure that its production capacity does not exceed the capacity mentioned in the consent and shall not carry out any expansion without the prior permission / NOC of the Board.



07/04/2022

**( Kuldeep Singh )  
Environmental Engineer**

*For & on behalf*

*of*

**(Punjab Pollution Control Board)**